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23 August 1956

MEMORANDUM FOR: THE RECORD

SUBJECT: Visit to [redacted] 25X1

1. Time and Place of Meeting: 17 and 20 August 1956, at [redacted] 25X1

2. Attendance: [redacted] 25X1

3. Discussion: For the past 6 weeks, little work has been accomplished on our projects at [redacted] due to a 2-week plant vacation followed by four weeks of moving. As of 20 August, [redacted] was, for the first time, back in full swing. On the 20th, all projects were reviewed to determine the status of each after this long delay of work. Each project will be reported under a separate heading. 25X1 25X1

a. P-77, Receiver Study: The receiver study is concentrating its efforts on mixer and converter circuits. There is a need for this basic information to develop better and higher frequency transistor receivers.

b. P-77 Transistor Oscillator: There is also a need for basic information in this field. In particular, for project AN-43 we are trying to obtain an oscillator which will be stable and which will operate instantaneously.

c. P-77, 7-Day Battery Pack for RT-1: This project has been suffering due to its very low priority. There is no definite date for its delivery at this moment. All concerned would like to have it finished by 10 September and if this can be done it will be delivered to APD by the undersigned.

d. P-77 490 KC Transmitter: The status is exactly the same as the 7-day battery pack mentioned above. In both cases, there are only minor mechanical packaging problems to be overcome.

e. P-77, RT-1: The units to be produced under the proposal submitted this month will be of a new circuit design and therefore will be called the RT-1A to distinguish them from the present RT-1's. The packaging and circuit design will be that used in the new RT-2's, but the frequency of operation will be the same as the existing RT-1's, namely,

namely, 10.9 mc. The ability to vary the frequency for 50 KC will be incorporated in this design as it can be done without a major revision. The reason for this change is that should there be another station on 10.9 the frequency can be shifted to produce better operating conditions. The undersigned has brought back with him samples of the new connectors which are to be used on this production run should they be acceptable to the operational people.

The 4 ST-1 transmitters and the one receiver which were given to [redacted] will be picked up and ready for delivery on 11 September. Also, on 11 September, two ST-2 transmitters and receivers will be ready for delivery. 25X1

f. P-77, AB-1 and AB-2: The R&D requirements for this project have been decided upon and are on record with [redacted] At present, there is being built a prototype receiver. There is no estimate at this time when the first system will be ready for delivery. 25X1

g. P-77, Transceiver Program: A 5mc transceiver set is being worked on, but at this time, there is no delivery date assigned. The undersigned is going to obtain from NRS one of their 5 mc body antennas to be fed into this project. The expected date of this antenna delivery is the end of October.

h. P-77, TBP-1: This project is to design a battery operated ST-2 transmitter. The expected delivery date is 1 November 1956.

i. P-77, AB-1: The [redacted] project has had no work done on it to date and it is expected to have no work on it until the first of October. The requirements will follow the original request and at some later date in the project, consideration will be given to the parachute locator problem. 25X1

j. P-77, Voltage Regulator: [redacted] at this point is doing nothing on this project. The reason for this is that the sponsor at this point does not have a definite plan in mind. The undersigned is trying to obtain a power cord and volt meter relay in order that [redacted] will at least have a working voltage regulator should interest in this project develop. The suggestion was made by [redacted] that maybe a carrier current system might handle this job. 25X1 25X1 25X1

k. AB-6: In the accoustical problem of AB-6 there are 2 cavities to be considered. One is in the condenser can in which the transmitteris molded, and the other is the cavity in which this condenser can sets. Nothing can be done about the latter cavity, but work is being done to move the resonance of the former cavity above the pass-band of the transmitter. It is expected that by the 20th of August, the optimum accoustical conditions will have been obtained.

This will be

This will be a poor example of this transmitter in operation, the fault lying with the above mentioned cavities and not with the transmitter itself. The system will undergo an operational check from now until the time it is picked up by the sponsor.

l. P-163B: The 20 remaining units under this contract are to undergo environmental tests starting some time during the week of 20 August. Ten of these units are readily available should the sponsor desire them at any time. A request is being submitted by [redacted] to extend the completion date of the environmental testing to 25X1
28 October 1956. This delay is not the fault of [redacted] 25X1
it is due to the delay in delivery of environmental test equipment.

m. P-163C: A prototype has been made and the production model is now being worked on. It is expected that where possible, these units will be given the same environmental tests as the ST-2. The delivery date of 15 September for ten transmitters and 5 converters will not be met. A month's delay is being requested by [redacted] 25X1
This delay is due to the move as has been mentioned earlier.

n. P-163D: (1-watt transmitter) Work on this project has been held up due to work on P-163C. Work should resume by the first week in September but there is no estimate of delivery dates at this time.

o. AH-43, [redacted] Project: Work has been held up due to 25X1
the selection of a low noise antenna and the switching question. If it is to be an electronic switch, it will need 4 transistors to 25X1
operate efficiently, but the space requirement for 4 transistors appears to be too great. [redacted] is visiting [redacted] 25X1
[redacted] on 24 August to see what they have designed in the 25X1
way of a mechanical switch. The potting of the antenna has been held up because of project AH-6, but is expected to get underway in the next two weeks. On this project are many fundamental problems to overcome and because of this, no delivery date is in sight.

p. P-177: [redacted] is to build 6 RCA and 6 GE transmitters to 25X1
be used [redacted] There is no estimate on delivery on this project. 25X1

q. AH-44: Parts have been ordered for the 6 carrier current systems and work will start after the AH-6 system has been accepted. The question of receivers compatible to this system is to be looked into by the undersigned, namely, [redacted] makes a carrier current receiver. The 25X1
estimated delivery date is two months after completion of AH-6.

[redacted] 25X1
TBS/APD

Distribution:
P-77
AH-6
P-163B, C, D
AH-43
P-177
AH-44

TBS/APD/AF/bf (23 Aug 56)